NESTING OF TAWNY FROGMOUTHS By David Fleav, b.sc.

The nesting efforts of the quaint Frogmouths in the Australian Section of the Zoological Gardens are of unusual interest, "for there appears to be no previous record of these birds breeding successfully under captive conditions. Ten years ago, late in the month of September, in my own collection at Ballarat, a peir of exceptionally tame Frogmonths gathered fine sticks and a few roots and manufactured a filmsy nest on a shelf in their enclosure. The female bird took to her crazy little structure immediately it was completed, but unfortunately she laid no eggs, though she continued to sit on the nest for nearly two months. I was enabled to observe many new calls of the birds during this period and it is surprising what a variety of notes they have. Both birds would spend some time at the nest after nightfall and the female was in the habit of uttering a running continuous call, which is best likened to the noise of a distant motor cycle. With head bent forward and body swaying from side to side she would maintain this series of rapid sounds sometimes for as long as a quarter of an hour. The male hird occasionally answered in similar fashion but his call was even more rapid. The ordinary call of the species so often heard in the country by night was intered very frequently by these birds at this time. The male bird usually "spoke" from the far end of the enclosure and the quiet but penetrating "oom-com-com" was uttered perhaps nineteen times before it ceased as mysteriously as it had begun and a short interval followed before the call began again.

When fiving round the aviary at night they sometimes uttered a croaking growl, and during daylight another sound used as a means of communication was a series of notes beginning loudly and rapidly and suddenly dying down again. The birds had a danger signal resembling the sound "oo-oo! oo-oo!" uttered quickly and sharply, and on the overhead appearance of a hawk the first bird to perceive the danger would acquaint its mate in this fashion. Immediately both would "freeze" into the very wonderful "broken limb" attitude. By mimicking this sound it is possible to cause even the quietest and most trusting Frogmouth to adopt its protective attitude.

Cats, possiums and other furred visitors in the vicinity of the nest built by the birds were treated with scant ceremony. With fiercely ruffled head, great glaring eyes, extended wings and vigorous claps of their large boaks the birds would attack these unwelcome intruders and drive them away. This brief account of the birds nesting so long ago is given because of the observation of intimate ways, many not possible in the case of the more fimid pair at present in the Znological Gardens.

On September 5, 1935, the female bird in a large aviary in the

Australian section was discovered perched lengthwise on a wooden beam near the ground. Her nest consisted of a small uprooted grass sod and a six-inch nail, and on this precarious support lay a single egg. Next day it rolled off and was broken on the ground helow. On September 8, the hen Frogmouth had made another flimsy nest of grass and small twigs on the limb of a pepper free in the aviary. The site had been previously prepared for her by means of arranging a hollowed platform of bark on the bough. Two eggs were laid on successive days, but again had luck dogged the bird, for on September 23, both were broken on the ground below the nest. Once again, for the third time, the persevering Prognouth laid a clutch of eggs and on November 10. two young birds were hatched. Several Nankeen Kestrels inhabiting the upper parts of the aviary were immediately removed in case they should develop a taste for the dainty little birds. However, the hoodoo remained, and when three days old one baby Frogmouth fell to the ground and its fellow suffered a similar fate at the age of eight days.

Rather in despair of success after this extraordinary run of misfortune I surrounded the nesting site with a prominent ridge of back, but was rather a fraid that the structure would not be to the Frogmouth's liking However, keen interest was revived on November 30, when the bird made her fourth attempt. She laid her first egg on this day and sat immediately. Another egg appeared the following day. For exactly four weeks the bird continued to brood very closely and at no time was she relieved by her mate. On the twenty-eighth day the first young bird hatched, followed two days later by a second. "The quaint "chicks" were solemu, tender little mites clothed in white down, and the mother-bird, who had been rather pugnacious and reluctant about leaving the nest even when brooding on eggs, now became quite savage and one more than one occasion she flew at me and knocked my hat flying. Her varying expressions and glaring yellow eyes, together with the unpleasant snaps of her strong beak were well calculated to scare intruders away from the nest.

Naturally the diet of the parent birds had been varied a good deal throughout the nesting season, and now with the advent of fledgelings the block or "feeding table" was spread each evening with a most appetizing array of chopped mice and frogs, finelyminced beef, meal worms, moths, and a shallow tray of earth worms. Not content with this alone the parent birds hunted through the aviary and several times dead spiders which had missed the gaping mouths of the young birds were discovered entangled in the down of their breasts. One chick made little headway and it was missing from the nest a week after the time of hatching. Apparently it had died and one of the parent birds swallowed it. The growth of the remaining fledgeling was slow Plate XXIV



Frogmouth fledgeling 17 days old



Photos. by D. Fleay.

Female Frogmouth defending her nest